

WHAT IS CLAIMED IS:

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1. A substrate for a liquid crystal display, comprising:
an insulating substrate;
a transparent electrode formed on the insulating substrate; and
a black matrix formed on the transparent electrode and a protrusion.

2. The substrate of claim 1, wherein the main protrusion is formed of a photosensitive layer.

3. The substrate of claim 2, wherein the black matrix and the main protrusion are formed through a same photolithography process.

10 4. The substrate of claim 2, wherein the black matrix is made of chrome.

5. The substrate of claim 2, wherein the black matrix is structured as a double layer made of chrome and chrome oxide.

6. The substrate of claim 2, further comprising a color filter formed between the insulating substrate and the transparent electrode.

15 7. A method for manufacturing a substrate for a liquid crystal display, comprising the steps of:

forming a transparent electrode on a substrate;

forming a black matrix layer;

20 depositing a photosensitive material on the black matrix layer to form a photosensitive layer;

patterning the photosensitive layer; and

etching the black matrix layer using the photosensitive layer as mask.

8. The method of claim 7, wherein the black matrix layer is formed on the transparent electrode.

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9. The method of claim 7, wherein a color filter is formed before forming the transparent electrode.

5 10. The method of claim 7, wherein the black matrix layer is a double layer of chrome and chrome oxide.

11. A liquid crystal display, comprising:
a first insulating substrate;
gate lines formed on said first insulating substrate and transmitting scanning
10 signals;

data lines insulatedly intersecting said gate lines and transmitting image
signals;

pixel electrodes formed in regions defined by the intersection of said data lines
and said gate lines;

15 redundant data lines formed on a same layer as said pixel electrodes;
switching elements connected to said gate lines, said data lines and said pixel
electrodes, said switching elements either transmitting or cutting off the transmission of
the image signals to said pixel electrodes according to the scanning signals;

20 a second insulating substrate provided opposite to said first insulating substrate
at a predetermined distance;

a common electrode formed on said second insulating substrate; and

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a protrusion pattern formed on said common electrode at least in regions corresponding to said redundant data lines and said protrusion pattern of an insulating material.

12. The liquid crystal display of claim 11, wherein said protrusion pattern is an organic black matrix.

13. The liquid crystal display of claim 11, further comprising a black matrix formed between said second insulating substrate and said common electrode.

14. The liquid crystal display of claim 11, wherein said pixel electrodes have an aperture pattern.

10 15. The liquid crystal display of claim 14, wherein the protrusion pattern and the aperture pattern of the pixel electrodes divide the pixel electrodes into four domains.

16. The liquid crystal display of claim 15, wherein the domains are polygonal having two parallel long sides.

15 17. The liquid crystal display of claim 16, wherein the domains are classified into first domains with long sides in a first direction and second domains with long sides in a second direction, wherein the first direction and the second direction form an angle of between 85 and 95 degrees.

18. The liquid crystal display of claim 17, wherein the first direction makes an oblique angle with respect to a side of the pixel electrodes.

20 19. The liquid crystal display of claim 11, further comprising liquid crystal material injected between said first insulating substrate and said second substrate, long axes of liquid crystal molecules of the liquid crystal material being vertically aligned to said first insulating substrate and said second insulating substrate in a state where no

electric field is generated between said first insulating substrate and said second insulating substrate.

20. The liquid crystal display of claim 11, further comprising twisted-nematic liquid crystal material injected between said first insulating substrate and second insulating substrate.

21. A liquid crystal display, comprising:

a first insulating substrate;

a transparent electrode formed on said first insulating substrate;

a light-blocking layer formed on said transparent electrode and made of metal;

and

a protrusion portion made of an organic layer and aligned with the light-blocking layer.

22. The liquid crystal display of claim 21, wherein the organic layer is photosensitive.

23. The liquid crystal display of claim 21, wherein a resistivity of the organic layer is $10^{13}\Omega\text{cm}$.

24. The liquid crystal display of claim 21, further comprising a second substrate provided opposing said first insulating substrate and having a plurality of pixel electrodes and thin film transistors, wherein said light-blocking layer overlaps areas corresponding to a non-transparent layer of the second substrate, and areas between the pixel electrodes.